ABSTRACT OF THE DISCLOSURE

Alterations to the transactivation (N-TAD) domain of HIF-1 alpha demonstrate this domain contains structures necessary for hypoxia-inducible transactivation, oxygen-dependent degradation, and VHL-HIF-1 alpha interaction. HIF-1 alpha sequences with alterations of the N-TAD domain, fragments and analogs thereof are useful in modifying or regulating the activity of bioentities. Agonists and antagonists of the N-TAD domain of HIF-1 alpha are also useful in modifying or regulating the activity of bioentities.